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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/821,565	03/29/2001	Mark M. Ishikawa	60123.803US01	5876
22877	7590	05/20/2005	EXAMINER	
FERNANDEZ & ASSOCIATES LLP 1047 EL CAMINO REAL SUITE 201 MENLO PARK, CA 94025			TRAN, TONGOC	
			ART UNIT	PAPER NUMBER
			2134	

DATE MAILED: 05/20/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/821,565

Applicant(s)

ISHIKAWA, MARK M.

Examiner

Tongoc Tran

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 09 March 2005.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-39 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-39 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

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### **DETAILED ACTION**

1. This office action is in response to Applicant's amendment filed on 3/9/2005. Claim 1 has been amended. Claims 1-39 are pending.

### ***Response to Arguments***

2. Applicant's arguments with respect to independent claims have been considered but are moot in view of the new ground(s) of rejection.

In respect to Applicant's argument on claim 14, Applicant references the claim as a rejection under 35 USC 103. However, claim 14 is rejected under 35 USC 102.

### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claim 14 is rejected under 35 U.S.C. 102(e) as being anticipated by Doi et al. (U.S. Patent No. 6,697,370).

In respect to claim 14, Doi discloses a method for determining the best connection or path for a router to transmit traffic to a specific destination on a

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network, wherein a path on a network includes a plurality of independent segments that are coupled together via links, and wherein the volume of users on the network defines the network load, comprising: analyzing the amount of network load; and analyzing link availability to determine the specific links to traverse, wherein the analysis of link availability comprises: analyzing traffic load on the specific link pathway, wherein the traffic load is the volume of users on the specific link; and analyzing the availability of the network (see col. 1, line 19-col. 5, line 52).

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Doi et al. (U.S. Patent No. 6,697,370) in view of Beigi et al. (U.S. Patent No. 6,363,056, hereinafter Beigi).

In respect to claim 15, Doi discloses a method as claimed in claim 14. Doi does not explicitly disclose but: Beigi discloses transmitting a sample packet from a starting point and measuring the amount of time for the Packet to return to the starting point (see Beigi, Abstract). It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of

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analyzing traffic load on a specific pathway taught by Doi with the teaching of determining the round trip time by using probe packets in order to estimate the expected amount of time of network traffic to be received (Beigi, Abstract).

5. Claims 1-13 and 16-39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shanklin et al. (U.S. Patent No. 6,578,147, hereinafter Shanklin) in view of Putzolu et al. (U.S. Patent No. 6,587,432).

In respect to claim 1, Shanklin discloses a detection system for identifying and eliminating excessive requests for information on a network to prevent the failure of a portion of the network, comprising (see col. 4, lines 25-41, denial of service):

at least one server, wherein the switching device and server are in electronic communication with each other; and wherein the switching device is configured to receive requests for information and attempts to respond to the request (see Fig. 1, col. 3, lines 10-18);

and an activity monitoring system, the activity monitoring system comprising a route arbiter and a traffic analyzer, wherein the activity monitoring system is in electronic communication with the switching device (see Fig. 2, col. 5, lines 14-55).

Shanklin discloses at least one switching device, wherein the switching device has predefined parameters for distributing and balancing incoming data packets (Fig. 2, col. 1, line 63-col. 2, line 13 and col. 5, lines 20-28, one-third of the sessions in a given datastream). Shanklin does not explicitly disclose a

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predefined parameters for receipt of an acceptable volume of requests for information. However, Putzolu discloses a network monitoring agent and a tracing agent monitors and analyze traffic on a network to detect network congestion condition (see col. 1, lines 41-55 and col. 3, line 43-col. 4, line 4, "congestion traffic may be traffic which existed prior to a excess traffic condition, such as in the case where other additional traffic, when added to a network, causes an excess traffic condition...or may be the traffic which existed on the healthy link prior to the failure..." (Putzolu, col. 1, lines 42-49). It is inherently required that a predetermined parameter is needed in order to determine whether the traffic volumes have reached a congestion condition). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the traffic monitoring and analyzing of network traffic volume to detect network congestion condition taught by Putzolu with the intrusion detection for identifying and detecting network attack with stored signature such as denial of service so that information about congestion traffic can be quickly and accurately collected (Putzolu, col. 2, lines 51-56).

In respect to claim 2, Shanklin and Putzolu disclose a detection system as claimed in claim 1, further comprising a firewall, wherein the firewall is configured to receive requests for information (see Shanklin col. 1, lines 19-16).

In respect to claim 3, Shanklin and Putzolu disclose a detection system as claimed in claim 1, wherein the route arbiter monitors the requests received by the router (see Shanklin, Fig. 1, col. 3, lines 10-18).

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In respect to claim 4, Shanklin and Putzolu disclose a detection system as claimed in claim 2, wherein the route arbiter is coupled to the firewall and the switching device, and wherein the route arbiter monitors the requests received by the firewall and the switching device (see Fig. 2, col. 1, lines 19-16, col. 3, lines 10-18 and col. 5, lines 14-55).

In respect to claim 5, Shanklin and Putzolu disclose a detection system as claimed in claim 1, wherein the route arbiter is configured to compare the volume of requests to the predefined parameters for the receipt of an acceptable volume of requests (see Putzolu, col. 1, lines 41-55 and col. 3, line 44-col. 4, line 4).

In respect to claim 6, Shanklin and Putzolu disclose a detection system as claimed in claim 1, wherein the route arbiter is configured to instruct the switching device to direct requests for information to the traffic analyzer (see Shanklin, Fig. 3-4, col. 5, line 55-col. 6, line 4 and col. 7, lines 20-28).

In respect to claim 7, Shanklin and Putzolu disclose a detection system as claimed in claim 1, further comprising a null address router, wherein the null address router is coupled to the traffic analyzer (see Shanklin, col. 4, lines 54-61).

In respect to claims 8, 11, 16, 17, 19, 21, 25-26 and 31, the claim limitations are similar to claims 1 and 4. Therefore, claims 8, 11, 16-17, 25-26 and 31 are rejected based on the similar rationale.

In respect to claim 9, Shanklin and Putzolu disclose a method as claimed in claim 8, wherein responding to the forwarding of packets of information further comprises instructing the first network to cease advertising the network address to the second network device (see Shanklin, col. 1, lines 19-26).

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In respect to claim 10, Shanklin and Putzolu disclose a method as claimed in claim 8, wherein responding to the forwarding of packets of information further comprises forwarding the packets of information from the analyzer to a null address router (see Shanklin, col. 4, lines 54-61).

In respect to claim 12, the claim limitation is similar to claim 9. Therefore, claim 12 is rejected based on the similar rationale.

In respect to claim 18, Shanklin and Putzolu disclose the detection system of claim 16, further comprising a firewall coupled to the switching device (see Shanklin, col. 1, lines 19-26).

In respect to claim 20, the claim limitation is similar to claim 10. Therefore, claim 20 is rejected based on the similar rationale.

In respect to claim 22, Shanklin and Putzolu disclose the method of claim 21, wherein the predefined condition is associated with abnormal network activity (see Shanklin, col. 4, lines 31-41).

In respect to claim 23, Shanklin and Putzolu disclose the method of claim 22, wherein the abnormal network activity is the occurrence of a nondecreasing volume of traffic at a predefined threshold level for a predefined period of time (see Putzolu, col. 1, lines 40-55 and col. 3, line 44-col. 4, line 4).

In respect to claim 24, Shanklin and Putzolu disclose the method of claim 21, wherein the predefined condition is associated with abnormal traffic patterns (see Shanklin, col. 4, lines 31-41).



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In respect to claim 27, Shanklin and Putzolu disclose the activity monitoring system of claim 26, wherein the route arbiter is coupled to the network via a switching device (see Shanklin, col. 5, lines 14-20).

In respect to claim 28, Shanklin and Putzolu disclose the activity monitoring system of claim 27, wherein the switching device is a router (see Abstract).

In respect to claim 29, Shanklin and Putzolu disclose the activity monitoring system of claim 26, wherein the predefined acceptance criteria indicate whether the influx of network activity is changing in volume (see Putzolu, col. 1, lines 44-55 and col. 3, line 44-col. 4, line 4).

In respect to claim 30, Shanklin and Putzolu disclose the activity monitoring system of claim 26, wherein the predefined acceptance criteria indicate that the network activity is not decreasing in volume, and wherein the predefined response criteria is a threshold network activity level (see Putzolu, col. 1, lines 44-55 and col. 3, line 44-col. 4, line 4).

In respect to claim 32, Shanklin and Putzolu disclose the method of claim 31, wherein the predefined redirection criteria cause the problematic traffic to be blocked (see Putzolu, col. 1, lines 44-55 and col. 3, line 44-col. 4, line 4).

In respect to claim 33, Shanklin and Putzolu disclose the method of claim 31, wherein the predefined redirection criteria cause the problematic traffic to be redirected to a device that does not respond to the problematic traffic (see Shanklin, col. 17, line 65-col. 18, line 12).

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In respect to claims 34-35, the claim limitations are similar to claim 33. Therefore, claims 34-35 are rejected based on the similar rationale.

In respect to claim 36, Shanklin and Putzolu disclose the activity monitoring system of claim 26, wherein the route arbiter is coupled to a peering point located upstream from a plurality of edge devices (see Shanklin, col. 5, lines 20-55).

In respect to claim 37, Shanklin and Putzolu disclose the detection system of claim 1, wherein the activity monitoring system is incorporated into the switching device (see Shanklin, col. 5, line 55-col. 6, line 65).

In respect to claim 38, Shanklin and Putzolu disclose the detection system of claim 1, wherein the route arbiter is incorporated into the switching device and the traffic analyzer is maintained in a separate device (see Shanklin, col. 5, line 55-col. 6, line 65).

In respect to claim 39, Shanklin and Putzolu disclose the detection system of claim 1, wherein the traffic analyzer is incorporated into the switching device and the route arbiter is maintained in a separate device (see col. 5, line 55-col. 6, line 65).

### ***Conclusion***

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tongoc Tran whose telephone number is (571) 272-3843. The examiner can normally be reached on 8:30-5:00.

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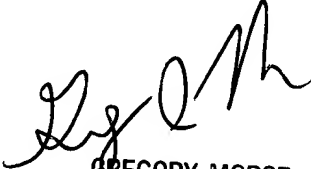
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gregory Morse can be reached on (571) 272-3838. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Examiner: Tongoc Tran  
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TT

May 16, 2005

  
GREGORY MORSE  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER